

## PATENT COOPERATION TREATY

PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)



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Applicant's or agent's file reference <b>FP68767-1RMS</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 00/ 35666</b>	International filing date (day/month/year) <b>28/12/2000</b>	(Earliest) Priority Date (day/month/year) <b>28/12/1999</b>
Applicant <b>PANGENE CORPORATION</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☒ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/35666

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, MEDLINE, BIOSIS, EMBASE, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 670 316 A (SENA ELISSA P ET AL) 23 September 1997 (1997-09-23) the whole document ----	1-14
Y	US 5 510 473 A (CAMERINI-OTERO RAFAEL D ET AL) 23 April 1996 (1996-04-23) abstract; example 9 ----	1-5,7-14
Y	BAUMANN P ET AL: "Role of the human RAD51 protein in homologous recombination and double-stranded-break repair" TIBS TRENDS IN BIOCHEMICAL SCIENCES, ELSEVIER PUBLICATION, CAMBRIDGE, EN, vol. 23, no. 7, 1 July 1998 (1998-07-01), pages 247-251, XP004126976 ISSN: 0968-0004 the whole document ----- -/-	1,2,6,9

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## ° Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

25 September 2001

Date of mailing of the international search report

02/10/2001

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/35666

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SENA E P AND ZARLING D A: "Targeting in linear DNA duplexes with two complementary probe strands for hybrid stability" NATURE GENETICS, vol. 3, 1993, pages 365-372, XP001028263 the whole document	
P, X	WO 00 56872 A (PANGENE CORP) 28 September 2000 (2000-09-28) the whole document	1-14

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/35666

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5670316	A	23-09-1997	US 5273881 A	28-12-1993
			US 5223414 A	29-06-1993
			AU 661505 B2	27-07-1995
			DE 69220084 D1	03-07-1997
			DE 69220084 T2	11-09-1997
			EP 0612352 A1	31-08-1994
			FI 941016 A	03-05-1994
			JP 6510201 T	17-11-1994
			KR 245284 B1	02-03-2000
			NO 940744 A	02-05-1994
			AT 153707 T	15-06-1997
			AU 2540192 A	05-04-1993
			CA 2116215 A1	05-03-1993
			DK 612352 T3	30-06-1997
			ES 2101867 T3	16-07-1997
			WO 9305178 A1	18-03-1993
			JP 2745816 B2	28-04-1998
			CA 2056983 A1	08-11-1991
			DE 69122712 D1	21-11-1996
			DE 69122712 T2	20-02-1997
			EP 0481065 A1	22-04-1992
			JP 3010738 B2	21-02-2000
			JP 4507198 T	17-12-1992
			WO 9117267 A1	14-11-1991
US 5510473	A	23-04-1996	US 5460941 A	24-10-1995
			US 5731411 A	24-03-1998
			AU 658386 B2	13-04-1995
			AU 9111691 A	11-06-1992
			CA 2095624 A1	10-05-1992
			EP 0556330 A1	25-08-1993
			JP 2739378 B2	15-04-1998
			JP 6500926 T	27-01-1994
			WO 9208791 A1	29-05-1992
WO 0056872	A	28-09-2000	AU 3769000 A	09-10-2000
			WO 0056872 A2	28-09-2000